

**Abstracts**

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lent users was only significant between lovastatin and pravastatin. **CONCLUSION:** Pravastatin is associated with less healthcare resource utilization in new users, possibly due to lack of interaction effects. In prevalent users, the differences were minimized, possibly due to adjustments in drug and dosage regimens.

**R2**

**RISK FACTORS FOR SHORT-TERM DIABETES COMPLICATIONS: AN ANALYSIS OF LINKED ADMINISTRATIVE CLAIMS AND CLINICAL LABORATORY DATA**

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Much of research on the costs of diabetes mellitus has focused on long-term complications. There are limited data on the factors associated with acute diabetes-related events. **OBJECTIVE:** The goal of this study was to identify predictors of acute diabetes complications in a managed-care setting. **METHODS:** Using a retrospective cohort design and a database that linked medical claims and clinical laboratory data, adult members of a New England health plan with a diagnosis of diabetes mellitus between January 1, 1994 through June 30, 1998 were identified. Inpatient admissions with diagnoses consistent with acute ("short-term") diabetes complications (represented primarily by hyperglycemia, hypoglycemia, and selected infections) were then evaluated, and expressed on a 3-year basis. Stratified and multivariate logistic regression analyses were employed to determine the influence of key factors, such as age, gender, mean glycosylated hemoglobin (HbA1c) value, whether the patient had a diagnosis of cancer, and whether the patient had long-term diabetes complications, on the risk of inpatient admission. **RESULTS:** Of 2,394 patients with diabetes mellitus, approximately 11% (269) had at least one inpatient stay for an acute complication over 3 years. The risk of inpatient treatment for short-term complications was found to increase 22% (odds ratio 1.22,  $P < 0.01$ ) for every one point increase in HbA1c. In addition, advancing age (odds ratios of 1.63 and 2.56 for patients 60 to 69 years and 70+ years relative to under 50 years, respectively; both  $P < 0.05$ ), long-term complications (odds ratio 9.39,  $P < 0.01$ ), and cancer (odds ratio 3.13,  $P < 0.01$ ) all were associated with increasing risk. **CONCLUSIONS:** In clinical practice, we found that poorer glycemic control, age, and comorbidity are independent risk factors for acute diabetes complications. Further research is needed to determine whether better risk-factor management (e.g., control of HbA1c) can reduce the rate of acute diabetes complications.

**R3**

**DONEPEZIL USE AND IMPACT ON COST AMONG PATIENTS WITH ALZHEIMER'S DISEASE**

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In 1996 the FDA approved donepezil for treatment of Alzheimer's patients with symptoms of memory and cognitive loss. A recent study projected that the cost of donepezil could be offset by reduced utilization over a two-year period. **OBJECTIVES:** The purpose of this study was to measure use of donepezil among Veteran's Health Administration (VHA) patients during FY'98 and the impact on cost. **METHODS:** Patients diagnosed with Alzheimer's disease in five VHA medical centers were identified and costs for inpatient and outpatient care were calculated based on Medicare reimbursement rates. Extended care costs were calculated at \$236 per day (VHA national per diem). Prescription costs were calculated using VHA Pharmacy Benefit Management prices. Patients with medical contraindications, those who died during the study period, and those admitted to an extended care facility prior to the beginning of the fiscal year, were excluded from the analysis. Regression analysis was used to measure the association between donepezil use and cost while controlling for severity, comorbidity, previous hospitalizations, and site. **RESULTS:** Donepezil was used by 11% (167) of patients with no contraindications ( $N = 1484$ ). The regression analyses indicated donepezil users had higher pharmaceutical (+\$800,  $P = 0.0001$ ) and outpatient costs (+\$801,  $P = 0.006$ ), but lower inpatient (acute plus extended care) costs (-\$1542,  $P = 0.10$ ). There was no substantial difference in total cost (+\$58,  $P = 0.95$ ). **CONCLUSION:** The results support the hypothesis that higher pharmaceutical and outpatients costs related to donepezil use are offset by lower inpatient costs. The extent of the offset may be greater for the VHA (due to substantial discounts with drug manufacturers), than would be found in other health care systems.

**R4**

**AVAILABILITY OF HIGHLY ACTIVE ANTIRETROVIRAL THERAPY ASSOCIATED WITH INCREASED SURVIVAL AND LOWER COSTS AT A VA MEDICAL CENTER**

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**OBJECTIVE:** The objective of this study was to compare survival and costs before and after the availability of